

Date: Monday, 11/05/2009 1:39:03 PM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: WELDMENT TOP PANEL
Job Number	: 47871		
Estimate Number	: 13028		
P.O. Number	:	Part Number	: D36501
This Issue	: 11/05/2009	S.O. No.	:
Prsht Rev.	: NC	Drawing Number	: D3650 REV.C
First Issue	: 11/05/2009	Project Number	: N/A
Previous Run	: 44672	Drawing Revision	: C
Written By	:	Material	:
Checked & Approved By	: <u>JD 09.05.11</u>	Due Date	: 05/06/2009
Comment	Est Rev:A New Issue 07-09-27 DD verified by: EC Est Rev:B ECN 1113P 08-01-22 DD verified by: EC Est Rev:C ecn1162 08-04-02 DD verified by: EC		

Qty: 4 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M304S26GA 304/316 0.018 SHEET



Comment: Qty.: 1.6622 sf(s)/Unit Total : 6.6486 sf(s)
 304/316 SS sheet 26 ga (0.018" thick)
 Batch: 109398 B 9-6-2

2.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET
 1-Cut as per Dwg D3650
 Dwg Rev: C B 9-6-2
 Prog Rev: C

(4)

2-Deburr if necessary

3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0 QC8 SECOND CHECK



Comment: SECOND CHECK

S 09/06/02 (4)

5.0 BRAKE NC NC BRAKE



Comment: NC BRAKE
 Form as per Dwg D3650

SB 09/06/10 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/05/2009 1:39:03 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WELDMENT TOP PANEL

Job Number: 47871

Part Number: D36501

Job Number:



Seq. #:	Machine Or Operation:	Description :
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6.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

5 09/06/10 (XCO)

7.0	MS20427M33	Rivet
-----	------------	-------



Comment: Qty.: 18.0000 Each(s)/Unit Total: 72.0000 Each(s)

Rivet

batch:

M110022 (69H) M111819 (32) E 09/06/11

8.0	MS210603K	Nut Plate
-----	-----------	-----------



Comment: Qty.: 6.0000 Each(s)/Unit Total: 24.0000 Each(s)

Nut Plate

batch:

M109590 E 09/06/11

9.0	MS210623K	Nut Plate
-----	-----------	-----------



Comment: Qty.: 3.0000 Each(s)/Unit Total: 12.0000 Each(s)

Nut Plate

batch:

M109590 E 09/06/11

10.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
------	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1
Assemble as per dwg D3650

E 09/06/11 (4)

11.0	QC5	INSPECT WORK TO CURRENT STEP
------	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP.

09/06/11 (4)

12.0	PACKAGING 1	PACKAGING RESOURCE #1
------	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Identify and stock

Location:

187 9/6/11 SP

13.0	QC21	FINAL INSPECTION/W/O RELEASE
------	------	------------------------------



Comment: FINAL INSPECTION/W/O RELEASE

09/06/12

MC 09-06-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 47871
Description: WELDMENT TOP PANEL		Part Number: D3650-1
Inspection Dwg: D3650-1 Rev: L		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .098	+ .004 - .001	.106	*			
Ø .213	+ .005 - .001	.216	*			
Ø .250	+ .005 - .001	.253	*			
.25	+/- .030	.251	*			
.344	+/- .010	.344	*			
.35	+/- .030	.350	x			
.312	+/- .010	.313	*			
2.26	+/- .030	2.259	*			
7.18	+/- .030	7.181	*			
9.55	+/- .030	9.551	*			
10.66	+/- .030	10.662	x			
12.02	+/- .030	12.022	x			
16.65	+/- .030	16.65	x			
17.58	+/- .030	17.58	*			
16.61	+/- .030	16.61	*			
.12	+/- .030	.122	x			
.17	+/- .030	.169	x			
15.80	+/- .030	15.80	x			
3.956	+/- .010	3.950	x			
2.02	+/- .030	2.022	x			
2.44	+/- .030	2.44				
4.03	+/- .030	4.03	x			
6.13	+/- .030	6.13	*			

Measured by: B	Audited by: S	Prototype Approval: A
Date: 9-6-2	Date: 09/06/03	Date: 7

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

8

7

6

5

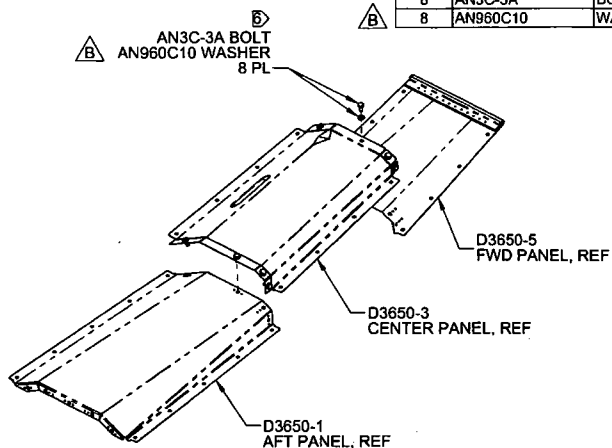
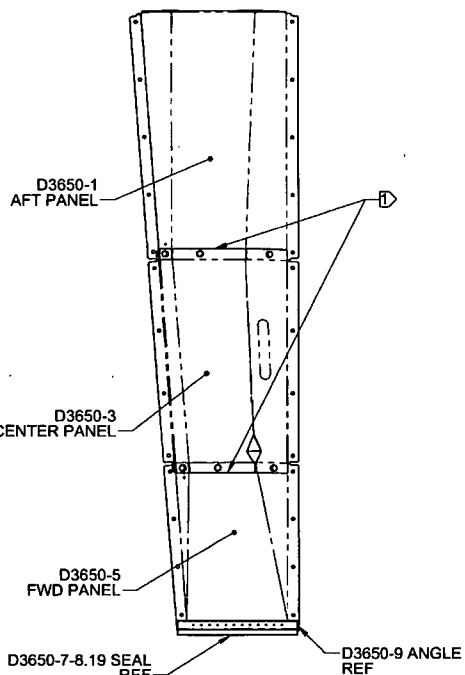
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3

2

1

QTY -041	PART NUMBER	DESCRIPTION
X	D3650-041	TUNNEL TOP PANEL ASSEMBLY
1	D3650-1	AFT PANEL
1	D3650-3	CENTER PANEL
1	D3650-5	FWD PANEL
8	AN3C-3A	BOLT
8	AN960C10	WASHER



UNDER REVIEW

07.07.05
PAR 05-008RELEASED
08.11.17**D3650-041 TUNNEL TOP PANEL ASSEMBLY**

NO
WORK ORDER
WITHOUT NOTICE
SUBJECT TO AMENDMENT
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SHOP COPY

NOTES:

- 1) SEAL ALL MATING SURFACES AND ALL GAPS USING PROSEAL 700 FIRE WALL SEALANT
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) UNITS: INCHES UNLESS OTHERWISE NOTED
- 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 5) IDENTIFICATION: NONE
- 6) TORQUE FASTENERS 15 TO 25 in-lb
- 7) WEIGHT: 3.3 lbs

C	REFORMATTED TO NEW STANDARDS; RELOCATED PART LIST (ZN D2-2); ADDED SECTION VIEW J-J & REVISE DIMENSIONS (ZN B7-5, C4-5); ADDED RECESS LOCATION & REVISED DIMENSIONS (ZN C6-6, D5-6); MS20615-4M5 WAS CR323-4-03 & NAS1149CN432R WAS AN960C4 (ZN D5-7; B5-7; B8-7)	RF	08.10.14
B	SHEETS 1, 2 & 7: UPDATED FASTENER QUANTITIES; UPDATED VIEWS SHEETS 3 & 8: REMOVED/RELOCATED HOLES; UPDATED VIEWS SHEET 4: 1.8 WAS 1.5; 1.0 WAS 0.8; UPDATED VIEW; ADDED NOTE 6 SHEET 5: REMOVED NOTE IN C6 & ASSOCIATED DIMS; UPDATED VIEWS SHEET 6: REMOVED/RELOCATED HOLES & ADDED CUTOUT TO D3650-3F; MOVED D3650-11/11F TO SHEET 9; ADDED DETAIL 1 SHEET 9: RELOCATED D3650-11/11F FROM SHEET 6; UPDATED DIMS OF D3650-11/11F	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. C
MFG. APPR.	RF	D3650	SHEET 1 OF 9
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	TOP PANEL ASSEMBLY	1:8
DATE	08.10.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

D

C

B

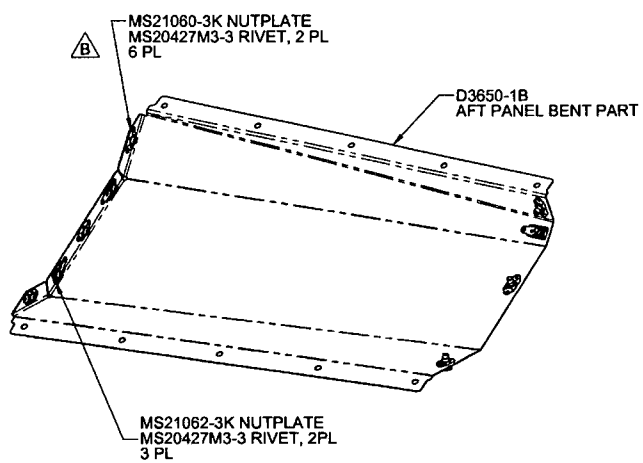
A

D

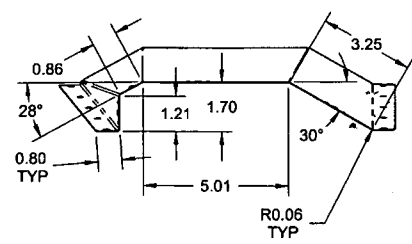
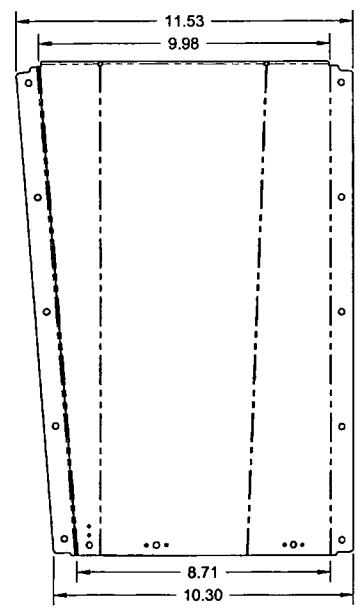
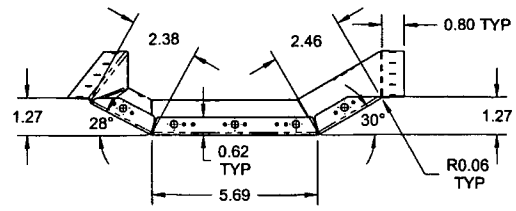
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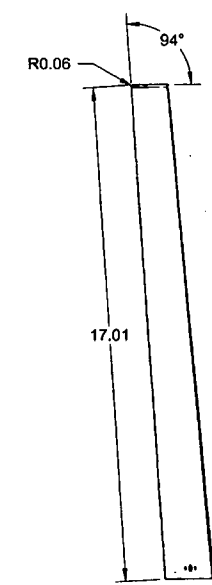
A



D3650-1 AFT PANEL



QTY	PART NUMBER	DESCRIPTION
-1		
X	D3650-1	AFT PANEL
1	D3650-1B	AFT PANEL BENT PART
18	MS20427M3-3	RIVET
6	MS21060-3K	NUTPLATE
3	MS21062-3K	NUT PLATE



D3650-1B AFT PANEL BENT PART
(MAKE FROM D3650-1F FLAT PATTERN)

UNDER REVIEW
09.02.03

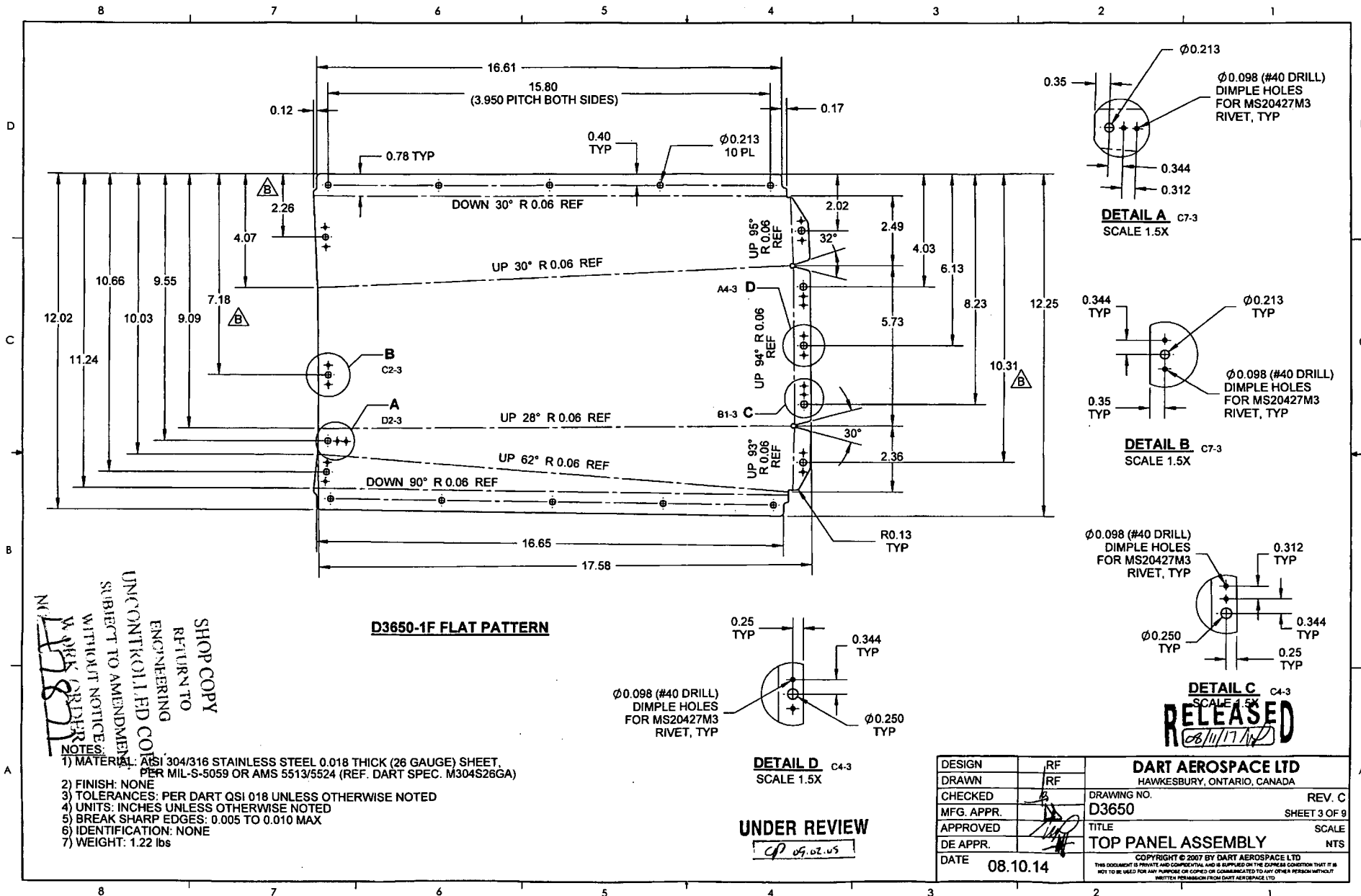
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06/10/10

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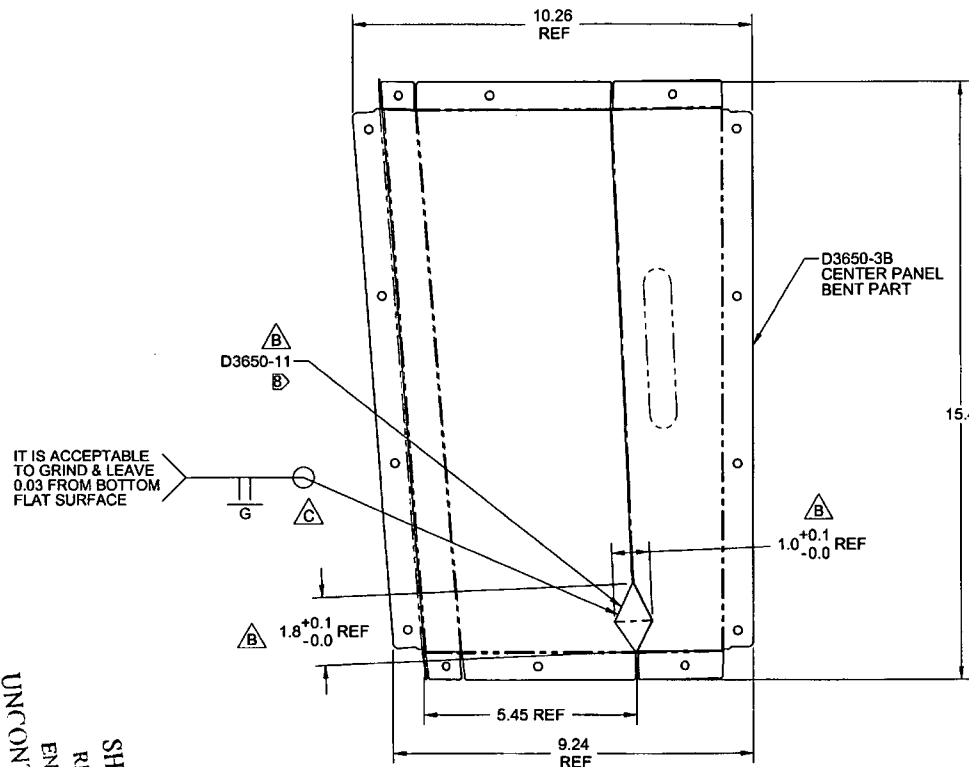
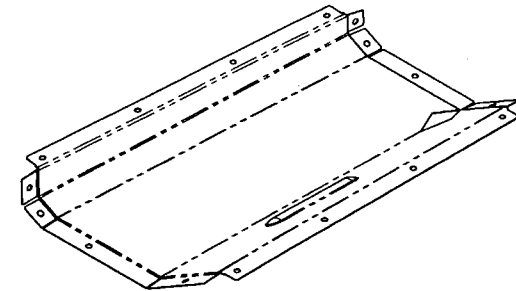
- NOTES:
- 1) FINISH: NONE
 - 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 5) IDENTIFICATION: NONE
 - 6) WEIGHT: 1.3 lbs

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MFG. APPR.			SHEET 2 OF 9
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8 7 6 5 4 3 2 1



QTY	PART NUMBER	DESCRIPTION
-3		
X	D3650-3	CENTER PANEL
1	D3650-3B	CENTER PANEL BENT PART
1	D3650-11	FILLER PLATE



D3650-3 CENTER PANEL
(LOOKING FROM OUT SIDE SURFACE)

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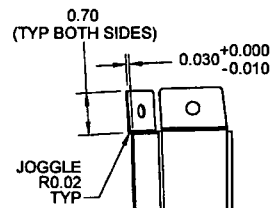
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- 1) WELD PER QSI 004
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 1.0 lb
 - 8) TRIM D3650-11 TO FIT AS REQUIRED

UNDER REVIEW

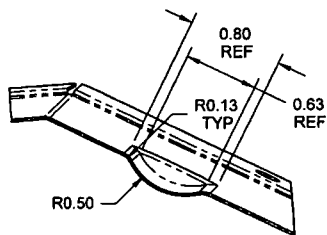
17 09.02.05

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08.11.17

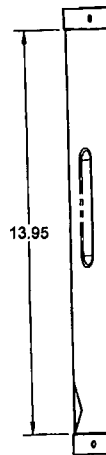
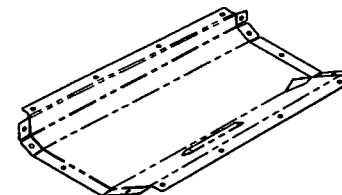
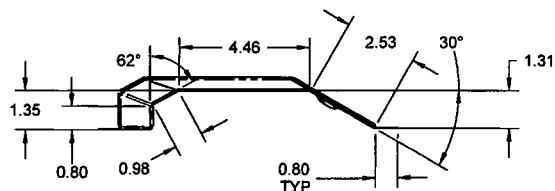
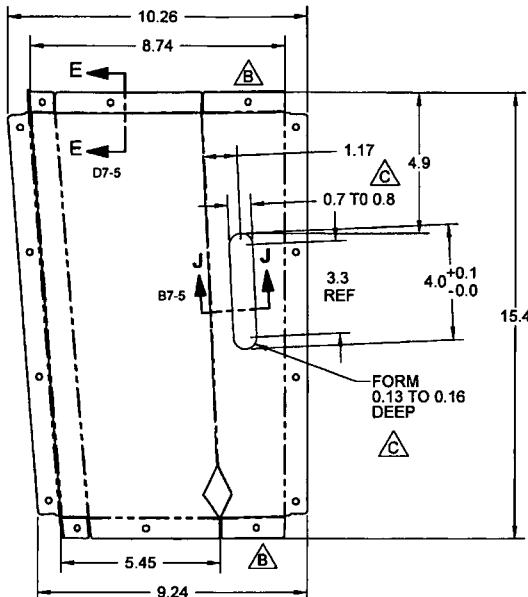
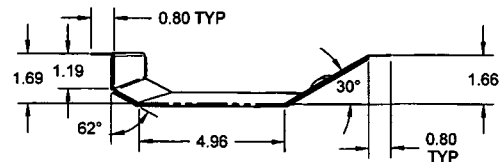
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MFG. APPR.		D3650	SHEET 4 OF 9
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SECTION E-E D5-5
SCALE 2X



SECTION J-J C5-5
SCALE 3.5X



D3650-3B CENTER PANEL BENT PART
(MAKE FROM D3650-3F FLAT PATTERN)

UNDER REVIEW
49 09.02.03

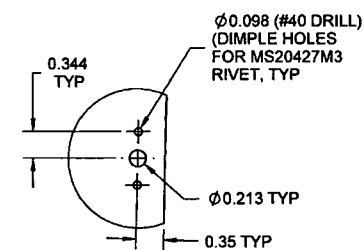
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MFG. APPR.		SHEET 5 OF 9
APPROVED		TITLE TOP PANEL ASSEMBLY SCALE NTS
DE APPR.		
DATE	08.10.14	

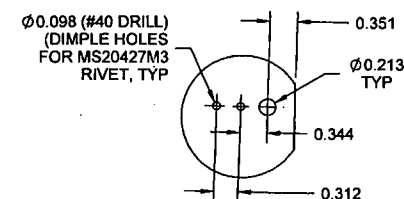
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WORK ORDER

- NOTES:
- 1) FINISH: NONE
 - 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 5) IDENTIFICATION: NONE



C5-8 **DETAIL G**
2 PL
SCALE 1.5X

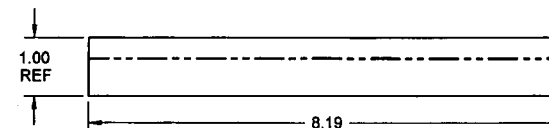
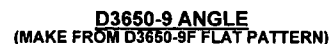


B5-8 **DETAIL H**
2 PL
SCALE 1.5X

RELEASED
08/11/17 JLD

- UNDER REVIEW
09.02.05

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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV.
MFG. APPR.	<i>[Signature]</i>	D3650	SHEET 8 OF 8
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	TOP PANEL ASSEMBLY	NTS
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D3650-7-8.19 SEAL



D3650-7-8.19 NOTES:




- D3650-7-8.19 NOTES:**
- 1) MATERIAL: P/N 8168-1 TADPOLE SEAL (REF. BELL P/N 120-104-1)
POSSIBLE SUPPLIER: EAGLE COPTERS OR BELL
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.05 lb
 - 8) PART NUMBER: D3650-7-X.XX
WHERE X.XX = LENGTH IN INCHES
EG. 12.50" LONG = D3650-7-12.50

RELEASE
08/11/17

D3650-9 & D3650-11 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET,
 PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI.018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: NONE
 7) D3650-9 WEIGHT: 0.05 lb
 8) D3650-11 WEIGHT: 0.007 lb

UNDER REVIEW
09-02-05

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3650 TITLE TOP PANEL ASSEMBLY COPYRIGHT © 2007 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRINTED AND COMMERCIAL REUSE OR REPRODUCTION OF ANY KIND IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.</small>	REV. C
DRAWN	RF		SHEET 9 OF 9
CHECKED			SCALE
MFG. APPR.			NTS
APPROVED			
DE APPR.			
DATE 08.10.14			